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Published in:
Envisioning the Future of Music Therapy

Publication date:
2016

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Ridder, H. M. O. (2016). The Future of Music Therapy for Persons with Dementia. In C. Dileo (Ed.), *Envisioning the Future of Music Therapy* (pp. 87-95). Temple University Press.

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The Future of Music Therapy for Persons with Dementia

Hanne Mette Ridder

Dementia

Dementia is a syndrome affecting memory, thinking, behavior, and activities of daily living, and is one of the major causes of disability and dependency among older people (World Health Organization, 2015). The physical, psychological, social and economic impact of dementia on the individual is massive. This disease also affects the individual's caregivers, family and community; with 47.5 million people with dementia worldwide, the impact on entire societies is thus substantial. Accordingly, the World Health Organization (2015) has called for a global and coordinated action to increase the awareness and understanding of this public health challenge.

Agitation is the most significant behavioral and psychological symptom that contributes to patient distress and caregiver burden in nursing home residents (Brown, Howard, Candy, & Sampson, 2012; Cohen-Mansfield & Libin, 2004; Zuidema, Koopmans, & Verhey, 2007), with agitation seen in the majority (48%–82%) of nursing home residents (Zuidema, et al., 2007). The manifestations of agitation include aggressive or inappropriate behavior, such as hitting, screaming, repetitive conduct or wandering, and are thought to be caused by neurocognitive disorders or pain (Cohen-Mansfield et al., 2012).

A Biopsychosocial Perspective on Agitation in Dementia

Understanding agitation in dementia as purely a result of neurodegeneration often leads to treatments that focus primarily on symptom alleviation, such as behavior management and/or psychotropic medication, especially antipsychotic drugs (Ballard, Waite, & Birks, 2012; Bergh, Engedal, Røen, & Selbæk, 2011; Rolland, et al., 2012). Treatment with psychotropic medication shows a modest reduction in symptoms, but may lead to severe, adverse effects and increased mortality (Ballard, et al., 2012). The addition of a psychosocial and person-centered perspective to the biological explanation of agitation may bring new insights, for example, the understanding that agitation is also caused by the person's reactions to unmet psychosocial needs and attempts to deal with or communicate these needs (Kitwood, 1997; Woods, 2001). This understanding is supported by the fact that the prevalence of agitation is predicted

by the culture of care in the nursing home (Stein-Parbury, et al., 2012; Zuidema, et al., 2007).

Person-Centered Care and Music for Decreasing Agitation

From a biopsychosocial perspective, psychological interventions and staff-training programs that focus on all aspects of the person are recommended and useful for decreasing agitation (Ballard, Corbett, Chitramohan & Aarsland, 2009; Guthrie, Clark, & McCowan, 2010; Seitz, et al., 2012; Stein-Parbury, et al., 2012). In their health technology assessment which included a review of 160 studies, Livingston and colleagues (2014) investigated the clinical and cost-effectiveness of sensory, psychological and behavioral interventions for managing agitation in older adults with dementia. The researchers concluded that “Person-centered care, communication skills and Dementia Care Mapping (all with supervision), sensory therapy activities, and structured music therapies reduce agitation in care-home dementia residents” (p. vi). Further reviews on non-pharmacological interventions highlight the positive effects of music and music therapy on agitation (Hulme, Wright, Crocker, Oluboyede, & House, 2010; Kverno, Black, Nolan, & Rabins, 2009; Spiro, 2010; Wall & Duffy, 2010).

Evidence-Based Research on Music and Music Therapy

The positive effects of music on agitation or other behavioral and psychological symptoms in dementia could not be confirmed in a 2011 Cochrane review on this topic; the authors of this review indicated that the quality of the ten included studies was too poor methodologically to draw conclusions (Vink, Bruinsma, & Scholten, 2011). However, in a later narrative synthesis systematic review, McDermott, Crellin, Ridder, & Orrell, (2013) concluded that music therapy reduces short-term agitation. Furthermore, in their meta-analysis, Ueda, Suzukamo, Sato, & Izumi (2013) found a moderate effect of music on anxiety and behavioral symptoms, specifically if the music intervention was implemented for more than three months.

Effects of music interventions on various outcomes in persons with dementia are also emphasized in interdisciplinary studies. It has been found that music increases engagement and engagement duration, specifically in “one-on-one socializing” (Cohen-Mansfield, et al., 2011, p. 863) and that music listening or singing in daily care situations reduces agitation (Brown, Götell, & Ekman, 2001; Casby & Holm, 1994; Gerdner & Swanson, 1993; Hammar, Emami, Götell, & Engström, 2011; Remington, 2002; Sung & Chang, 2005; Tabloski, McKinnon-Howe, & Remington, 1995; Thomas, Heitman, & Alexander, 1997; Zare, Ebrahimi, & Birashk, 2010) and leads to a higher degree of compliance (Clark, Lipe, & Bilbrey, 1998; Thomas, et al., 1997).

Recent RCTs point to the effects of group music therapy on reducing depression (Chu, Yang, Lin, Ou, Lee, O'Brien, & Chou, 2013) and for reducing agitation at the same level as occupation therapy (Vink, Zuidersma, Boersma, de Jonge, Zuidema, & Slaets, 2013). In addition, an explorative RCT showed that

agitation disruptiveness increased during standard care but decreased after six weeks and 12 individual music therapy sessions. This difference was significant ($p = 0.027$), with a medium effect size (0.50). Furthermore psychotropic medication was prescribed significantly more often during standard care than during music therapy ($p = 0.02$) (Ridder, Stige, Qvale, & Gold, 2013).

As the positive results of these recent RCTs concerning the effects of music therapy in dementia care are not yet included in updated meta-analyses, clear evidence is still missing at this level, however, it is expected that these new findings will help provide greater support for and more precise answers to questions regarding treatment and effects. In addition, these promising results may influence national clinical health guidelines, where music therapy and other types of non-pharmacological treatment are not yet included, thus rendering medical treatment as the only recognized treatment option.

Clinical Music Therapy Practice and Theory

Music therapy clinical practice with older adults or in dementia care is described in recent music therapy handbooks by Bunt & Stige (2014), Eyre (2013) and Wheeler (2015) in chapters by Abbott (2013), Young (2013) and Ridder & Wheeler (2015). Other seminal books serve also as resources for clinical applications of music therapy in dementia care (Aldridge, 2000; Belgrave, Darrow, Walworth & Wlodarczyk, 2011; Bright, 1997; Clair & Memmott, 2008).

Music therapy clinicians have described specific methods and techniques in dementia care, e.g., the use of singing and voice work (Ridder, 2003, 2011) and clinical improvisation (Ridder & Gummesen, 2015). McDermott, Orrell & Ridder (2014) have suggested a psychosocial model of music in dementia care based on qualitative interviews with care home residents, relatives, staff and music therapists on meaningful musical experiences. This model proposes that persons with dementia preserve individual preferences, and by sustaining musical and interpersonal connectedness, the person feels valued and quality of life is maintained.

Two recent assessment tools have also been tested for both community and clinical contexts respectively. Vanstone and colleagues (2015) have developed an informant-report questionnaire for measuring engagement with music through the following six subscales; Music in Daily Life, Emotional Listening Experience, Musical Performativity, Musical Consumer Behaviour, Responsive Music Listening, and Musical Preference. In addition, McDermott, Orrell & Ridder (2015) have developed the *Music in Dementia Assessment Scales* that measure five visual analogue scale items: Levels of Interest, Response, Initiation, Involvement and Enjoyment either pre/post music therapy by proxy raters or during music therapy by the music therapist.

Bunt & Stige (2014) have described the growth of music therapy and have emphasized the sustaining of collaborative, cross-professional work. They suggest that professional music therapists involve something more than competent performance of prescribed procedures. Music therapy practice is therefore seen to balance between direct and indirect work in community as well as in clinical

contexts. As an example, direct music therapy work often implies referral of a person with dementia to music therapy treatment with an expected outcome on e.g., agitation, and based on establishing a relationship through music. On the other end of the continuum is indirect work that includes the music therapist's guidance and supervision of caregivers in how to integrate music in daily activities and in care. The music therapist aims at supporting the relationship between the person with dementia and relatives, caregivers, and/or the community.

Other Current Developments in Music

Technological development has given new perspectives to research in music and the brain and body. In neurocognitive science particularly, new knowledge has been gained from research on the healing power of music (Altenmüller & Schlaug, 2012; Thompson & Schlaug, 2015), brain correlates and music-evoked emotions (Koelsch, 2014), and insights into music, emotion and dementia (Särkämö, et al., 2012). In a review of the literature, Croom (2015) explores how music practice and participation can function as useful means for positively influencing emotions and well-being. Although not music therapy, the *Music and Memory Project* developed by social worker, Dan Cohen, has attracted worldwide interest, and the documentary *Alive Inside* (2014) about this project received the audience award at the Sundance Film Festival in 2014. This seemingly global interest in and increased awareness of the function of music from very different professions and scientific fields has contributed to the development of a rich body of knowledge of great value for the music therapy profession.

Recommendations

The increased body of knowledge on how music affects consciousness, wellbeing, physiological arousal, memory, cognition, and social cohesion in people with dementia and their caregivers points to music therapy as an important intervention in the global action for persons affected by dementia. As a consequence, there is a need for the integration and amalgamation of recent evidence-based research and the rich knowledge base of music applications. This puts a demand to interdisciplinarity within a biopsychosocial approach to dementia care. For the music therapy profession this demands competences to build links within the multidisciplinary team and between various approaches to music therapy. Bunt & Stige (2014) describe this as relying on a culture of hybridity, striving towards reflective integration of theory and practice. This may involve defining music therapy within a broad biopsychosocial understanding, approaching each person with dementia from a person-centered approach. The consequence is increased demands on specialized professional music therapists who are well-informed by the body of knowledge within the music therapy discipline, but also within the culture of dementia care. The music therapist must have the competences to carry out music therapy treatment carefully tailored to

the person with dementia, but also to advise and guide other professionals and caregivers in how they can support and communicate with the person with dementia and increase quality of life. The music therapist must be able to work directly with each person as well as indirectly; in clinical contexts as well as in community contexts.

In summing up, an overall integrative approach is important in order to continue the promising development of music therapy in dementia care. This can be summarized in the following recommendations:

1. Person-centered approach to the individual with dementia
2. Biopsychosocial approach to dementia care
3. The music therapist as a specialized professional
4. Interdisciplinarity
5. Integrative approach to research, theory and practice

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